

F A C T S H E E T

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Bed Bugs

Bulletin #5004

Introduction

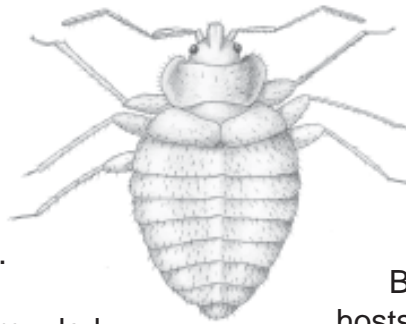
Bed bugs are making a comeback in the U.S. for several reasons. Some factors include increased international travel, increased popularity of thrift shops, yard sales, and buying used furniture. Also, the practice of using specific household pest control tactics, and crowded living conditions in certain apartment complexes and neighborhoods has added to the problem. Bed bugs have a secretive life style and can hide in any crack or crevice, going undetected for quite a while.

In addition, bed bug eggs are tiny (smaller than a pinhead) and hard to detect. In a heavy infestation, they can be practically anywhere. For these reasons, we suggest you contact a licensed pest management professional with plenty of bed bug experience.

Description & Biology

Adult bed bugs are brown, flat and about a 1/4 inch long, with a soft, rounded look. After a blood meal they are dark red, rounded (distended), and about 3/8 inch long.

These pests usually come out at night or in darkened areas. The pest's small white eggs hatch into almost transparent nymphs that start feeding at the first opportunity and molt five times before becoming adults. Usually, all stages of bed bugs are present in an infestation. A temperature of



70-80°F is ideal for bed bug development. Bed bugs can live from months to over a year without feeding. At least three generations per year are possible with proper temperature and food supply.

Bed bugs typically hide close to their hosts, however, they can travel up to 20 feet (sometimes more) to find one. When hiding places and hosts are few, they may be found almost anywhere-- in the seams of mattresses, in bed springs, in cracks of floorboards, behind peeled wallpaper, in picture frames, in couches, stuffed chairs, clothing and even the seams of curtains; wherever a dark crack or crevice might be. Dark excrement spots of partially digested blood are often found where they rest. Cast skins will also be found, especially where infestations are heavy.

Bed bugs usually feed at night, but when very hungry they are less likely to wait for darkness. Bed bugs inject a fluid into their host to help them get their blood meal. This fluid makes some people sensitive to bites, causing irritation, itching and inflammation. Other people can live with bed bugs and not be aware of their presence. In spite of their feeding habits, bed bugs are not known to carry diseases.

There seems to be no consistent way to determine a bed bug bite without actually finding the bugs. Pets, birds, rats or mice may help support bed bug populations. These pests are also

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common in poultry houses and occasionally infest areas where animals are kept. Bed bugs closely resemble bat and swallow bugs, which exhibit similar behavior. The key to bat and swallow bug management is targetting the resting area and bat/bird proofing structures.

Management

Preventing bed bug infestations is the first step in management. When traveling, always check your hotel room for bed bugs before you bring any suitcases, duffel bags, purses etc. into your room. The second step in proper management is to get proper identification. This can be done by sending a specimen in rubbing alcohol to the pest management office. There are several methods used to monitor for bed bug activity, you may need to contact a licensed professional to get proper monitoring methods, which may include the use of a dog, and/or heat/CO₂/lure traps. Control of bed bugs can be difficult, especially in homes that have many cracks and crevices, loose wallpaper, etc. Examine used bedding and beds before use. At least four actions should be considered to help with management.

1) Vacuuming and de-cluttering. Vacuuming can eliminate some bed bugs when concentrated in a specific area. It also facilitates insecticide penetration of cracks and crevices. It is possible that the vacuum cleaner itself can become infested. So, discard vacuum bag contents right after use, in a sealed plastic bag and closely look over the vacuum and attachments for bed bugs and eggs. De-cluttering of objects laying on the floor and furniture eliminates potential hiding places (especially items stored under the bed).

2) Mattress and box spring encasements. These can be used to salvage beds (or protect new beds) that may be infested. High quality bed bug-proof encasements will seal in bed bugs, which eventually die, and keep additional bed bugs out.

3) Laundering. Suspected infested clothing can be washed on the hot cycle and then put in the dryer at the high setting for 30 minutes. Other non-washable objects can be put in the dryer at high for 30 minutes.

4) Solarizing and freezing. Certain items can be placed in plastic bags and put in the sun or hot vehicle for a day to solarize them. The temperature inside should be above 120°F. Heat-sensitive objects may be placed in a freezer (temperature below 32°F) for several days.

Bed bug infestations are extremely difficult to manage. Again, we suggest you contact a licensed pest control professional to do the job.

The trained pest control professional may offer several options for bed bug management. One option is to use registered insecticides. Another method involves the use of steam wands to direct steam into cracks, crevices, and other hiding places. A third method, which is becoming very popular, is to use dry heat. In the lab, temperatures of 113°F will kill all stages of bed bug. However, in a building it can be quite difficult to get all areas of the unit to the required temperature and for the length of time it needs to be held. This treatment is best left to the professionals. Heat may destroy electronics, pictures, and other personal items. Often, it will take a combination of multiple management strategies to manage an infestation. Remember, it can be quite expensive to control bed bugs correctly.

**When Using Pesticides
ALWAYS FOLLOW
LABEL DIRECTIONS!**

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Where trade names are used, no discrimination is intended and no endorsement by Cooperative Extension is implied.